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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,971	02/20/2002	Shunpei Yamazaki	07977-303001	2205
26171	7590	01/13/2006	EXAMINER	
FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			MULPURI, SAVITRI	
			ART UNIT	PAPER NUMBER
			2812	

DATE MAILED: 01/13/2006

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/081,971  
Filing Date: February 20, 2002  
Appellant(s): YAMAZAKI ET AL.

**MAILED**

**JAN 12 2006**

**GROUP 2800**

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Yamazaki et al  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 3/28/2005 appealing from the Office action mailed 8/8/2005.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(2) Related Appeals and Interferences**

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal contained in the brief. Therefore, it is presumed that there are none. The board, however, may exercise its decision to require an explicit statement as to the existence of any related appeals and interferences.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

20020018912

Jung et al

2-2002

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-11, 19, 24-50, are rejected under 35 U.S.C. 102(e) as being anticipated by Jung et al (US 2002/0018912 A).

Jung et al teaches a method of depositing a layer for electroluminescent device: Jung teaches successively forming a first function region comprising hole transportation layer of first organic compound on an electrode, organic emission layer and organic electron transportation layer. Jung et al specifically teaches simultaneous irradiation of ultraviolet light generated by lamp during deposition, wherein ultraviolet light having wavelength in the range of 100-200nm or 254 nm to 320 nm to result compact film formation (fig.2 and related description and para0062). Jung et al teaches direction of irradiation is from the same direction of evaporating of the first and second organic compound, wherein evaporation source from which the first organic compound is evaporated is different from a evaporation source from which the second organic compound is evaporated, and wherein first organic compound source is evaporated from first evaporation source and second organic compound is evaporated from second

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evaporation source (see fig. 1 and related description). Jung also discloses light source, first evaporation source and second evaporation source are all in same plane (see para0036-0039, para0077. Jung et al clearly discloses simultaneous deposition of more than two organic compounds in vacuum deposition chamber, which inherently results mixed region of first organic compound and second organic compound, which is essential for making efficient electroluminescent devices giving emission at desired wave lengths (see para 0036 - para 0039, para0076-0077 and claim 9).

Jung et al specifically teach forming an organic thin film by simultaneous deposition of organic compound A and organic compound B and simultaneous irradiation by means of vacuum deposition (fig.1), wherein the organic thin film prepared by polymerization of the compound formula 1 having at least one acetylene group. Jung et al also teach forming electroluminescent device can have hole transportation layer, emission layer and electron transport layer (fig2), wherein transportation layer or emission layer formed by depositing at least one compound in formula 1, which suggest that transportation layer or emission layer can have at least one organic compound A or B or together, which satisfy the instant claimed process.

Claims 20, 51-54 are allowed.

#### **(10) Response to the Argument**

Appellant argues that Jung et al nowhere describes a first function region with a first organic compound, a mixed region, a second function region with second organic compound, wherein the mixed region is formed of first organic compound and second

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organic compound. However, Jung et al specifically teach forming an organic thin film by simultaneous deposition of organic compound A and organic compound B and simultaneous irradiation by ultraviolet light (UV) for polymerization in vacuum deposition chamber (Fig.1). Jung et al also teach the organic thin film prepared by of the compound formula 1 can have organic compounds A and B having acetylene group (see para 0028, 0036,0039).

Jung et al also teach forming electroluminescent device can have hole transportation layer, emission layer and electron transport layer (see third drawing in fig2), wherein transportation layer or emission layer are formed by deposition of at least one compound in formula 1, which suggest that transportation layer or emission layer can have at least one organic compound i.e., organic compound A or organic compound B or together. Since Jung et al gives a choice of simultaneously depositing organic compound A and B, the emission layer can be mixture of organic compound A and organic compound B (see para 0037-0039, para 0076-0077). Moreover, during vapor deposition in the invention of Jung et al, while shutter in vapor deposition chamber (fig.1) is being closed and opened, inherently the emission layer has organic compounds used for hole transport layer and electron transport layer, because there is a interfacial effect at the interface of the hole transport layer and the emission layer and at the interface of the emission layer and the electron transport layer forming mixed regions of the organic compounds, which are used to form the hole transportation and the electron transport layer. Also, in forming electroluminescent organic devices, the emission layer is a grading organic layer with mixed organic compounds, which are

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used to form hole transportation layer and electron transportation layer, see for evidence Fig. 1 layers 29, 31, 30 in So et al (US 5, 925,980).

**(11) Appendix of Evidence**

None

**(12) Appendix of Related proceedings**

None

The following ground(s) of rejection are applicable to the appealed claims: For the above reasons, it is believed that the rejections should be sustained.

Respectfully Submitted,

Savitri Mulpuri

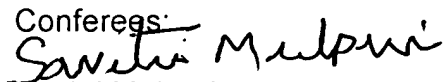
Primary Examiner

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January 07 2006

Conferees:

  
Savitri Mulpuri

Michael Lebentritt

  
AHH  
Andrew Hirshfeld